UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,520	01/05/2001	Heiko H. Ludwig	CH9-1999-0042	5060

7590 10/18/2005	EXAMINER
Anne Vachon Dougherty	BACKER, FIRMIN
3173 Cedar Road	
Yorktown Heights, NY 10598	

ART UNIT	PAPER NUMBER
3621	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/755,520	LUDWIG ET AL.
	Examiner	Art Unit	
	FIRMN BACKER	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>03 August 2005</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-36</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) <u>1-20 and 27-36</u> is/are allowed.

6) ☒ Claim(s) <u>21-26</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

EA

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1-36 have been considered but are moot in

view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

3.   Claims 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

4.   Regarding claims 24-26, the word "means" is preceded by the word(s) "receiving,

retrieving, transmission, ..." in an attempt to use a "means" clause to recite a claim element as a

means for performing a specified function. However, since no function is specified by the

word(s) preceding "means," it is impossible to determine the equivalents of the element, as

required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App.

1967).

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 21-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Sudia et al

(U.S. 2002/0029337).

7.   As per claims 21, Sudia et al teach a Transaction Authorization Method encoded on a

computer readable medium, the method having the following steps: (a) receiving a request for a

transaction; (b) obtaining an electronic representation of a document having details of the

transaction from a Digital Document Database; (c) obtaining the role certificate signed with a

signature by a Transaction Administrator from a Role Certificate Database and verifying the

signature; (d) returning the transaction details to the requester; (e) awaiting and receiving from

the requester the completed representation, signed by the requester; (f) requesting the

Authorization Structure for the transaction from the Authorization Structure Database, the

Authorization Structure being pre-signed with a signature by the Transaction Administrator and

verifying the signature, and choosing a permission set of role names and user members of the

permission set to contact to sign in these role names; (g) forwarding details of the transaction

request with the signature of the requester to others having roles corresponding to the chosen

permission set and collecting signatures of each role indicated in-the permission set; (h)

requesting role certificates from the Role Certificate Database and signatures for each member of

the permission set and encoding the same on the document; and (i) forwarding the completed

electronic document including the signatures and role certificates to the requester, the document

including authorization details required in order to confirm the validity of the transaction (*see*

paragraphs 0024, 0043, 0050, 0054, 0074-0075, 0081, 0085).

8.   As per claims 22, Sudia et al teach a Transaction Authorization Method wherein the role

certificates and the Authorization Structure consist of hashed information about permission sets

and roles, such hashed information substituting for the unhashed role certificates and permission

sets (*see paragraphs 0024, 0043, 0050, 0054, 0074-0075, 0081, 0085).*

9.   As per claims 23, Sudia et al teach a Transaction Authorization Method of receiving an

electronic document representing a transaction, associated transaction details being signed by a

Transaction Authority, a collection of role certificates certifying named roles signed by a Role

Authority, the transaction details signed by each of the signing keys corresponding to the

verification keys in the role certificates, and the Authorization Structure; (b) using a verification

key of the Role Authority to check each certificate on the document; (c) in the following manner,

checking the signatures on the transaction details using the verification keys in the supplied role

certificates: i. extracting the named roles from the role certificates; ii. hashing the roles using a

hash-of-hashes process; iii. checking the computed hash value of the transaction against that was

originally signed by the Transaction Authority to ensure that it is equal to the value for the

transaction received in the Authorization Structure; iv. using the output of the hash-of-hashes

process as input to check the signature on the hash-of-hashes process; if the produced hash-of-

hashes string matches the hashed string signed by the Transaction Authority, then assuming that

the request is authorized; and (d) reporting the result (*see paragraphs 0024, 0043, 0050, 0054,*

0074-0075, 0081, 0085).

10.   As per claims 24, Sudia et al teach a distributed workflow management system encoded

with a Transaction Authorization Method, the method having the following steps: (a) receiving

means for receiving a request for a transaction; (b) retrieving means for obtaining an electronic

representation of a document having details of the transaction from a Digital Document

Database; (c) retrieving means for obtaining the role certificate signed with a signature by a

Transaction Administrator from a Role Certificate Database and verifying the signature; (d)

transmission means for returning the transaction details to the requester; (e) receiving means for

receiving from the requester the completed representation, signed by the requester; (f) querying

means for requesting the Authorization Structure for the transaction from the Authorization

Structure Database, the Authorization Structure being pre-signed with a signature by the

Transaction Administrator; (g) verifying means for verifying the signature; (h) selection means

for choosing a permission set of role names and user members of the permission set to contact to

sign in these role names; (i) transmission means for forwarding details of the transaction request

with the signature of the requester to others having roles corresponding to the chosen permission

set and collecting signatures of each role indicated in the permission set; (j) retrieving means for

requesting role certificates from the Role Certificate Database and signatures for each member of

the permission set; (k) encoding means for encoding the signatures gathered in step (j) on the

document; and (l) transmission means for forwarding the completed electronic document

including the signatures and role certificates to the requester, the document including

authorization details required in order to confirm the validity of the transaction (*see paragraphs

0024, 0043, 0050, 0054, 0074-0075, 0081, 0085*).

11.   As per claims 25, Sudia et al teach a system wherein the role certificates and the

Authorization Structure consist of hashed information about permission sets and roles, such

hashed information substituting for the unhashed role certificates and permission sets (*see

paragraphs 0024, 0043, 0050, 0054, 0074-0075, 0081, 0085*).

12.   As per claims 26, Sudia et al teach a distributed workflow management system encoded

with a Transaction Verification Method, the method having the following steps: (a) receiving an

electronic document representing a transaction, associated transaction details being signed by a

Transaction Authority, a collection of role certificates certifying named roles signed by a Role

Authority, the transaction details signed by each of the signing keys corresponding to the

verification keys in the role certificates, and the Authorization Structure; (b) using a verification

key of the Role Authority to check each certificate on the document; (c) in the following manner,

checking the signatures on the transaction details using the verification keys in the supplied role

certificates: i. extracting the named roles from the role certificates; ii. hashing the roles using a

hash-of-hashes process; iii. checking the computed hash value of the transaction against that was

originally signed by the Transaction Authority to ensure that it is equal to the value for the

transaction received in the Authorization Structure; iv. using the output of the hash-of-hashes

process as input to check the signature on the hash-of-hashes process; if the produced hash-of-

hashes string matches the hashed string signed by the Transaction Authority, then assuming that

the request is authorized; and (d) reporting the result (*see paragraphs 0024, 0043, 0050, 0054,*

0074-0075, 0081, 0085).

Allowable Subject Matter
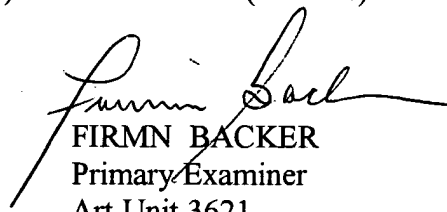
13.   Claims 1-20 and 27-36 allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to FIRMN BACKER whose telephone number is 571-272-6703.

The examiner can normally be reached on Monday - Thursday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FIRMN BACKER
Primary Examiner
Art Unit 3621

October 13, 2005